Tue 12 Apr 6.30-8pm

## **Creatures of the Lines**

with Sonia Levy and Heather Swanson, moderated by Filipa Ramos

Live transcript

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#### **SPEAKERS**

Canan Batur, Laura Purseglove, Sonia Levy, Heather Swanson, Filipa Ramos

#### 01:04 Canan Batur

Hi, good afternoon, folks. A very warm welcome to all of you tuning in. My name is Canan Batur, and I'm the curtor of live programmes here at Nottingham Contemporary. Some of you might already know Nottingham Contemporary is a contemporary art centre located in the Midlands in the UK. We hope we hope all of you and your families are well and healthy in these complicated times. Sorry about that. And it's a great pleasure to give you a word of hosting for tonight's conversation between Sonia Levy, environmental anthropologist Heather Swanson, and writer and curator Filipa Ramos to elevate the ideas and knowledge that brought Sonia Levy's new film Creatures of the Lines into life. The film is still available on our website for another five days, so do watch it if you haven't had a chance to do so until now. Creatures of the Lines was produced in collaboration with Heather Swanson, and it explores how the desire for economic growth and linear progress has produced straightened forms in England's watery terrains and ask what risks are associated with the conversion of once curvy and braided routes into linearised landscape. Drawing on their long standing research interests and conversations



exploring the risks to an aquatic ecology with academics from Loughborough University, the film explores how English waterscapes have been transformed why the construction of canals. As arteries of British Empire canals linked Indian cotton fields to domestic textile mills, facilitating vast ecological transformations from monoculture agriculture in the colonies, to industrial discharges in England's waters, soils and air, and thus serve as a key site for exploring often overlooked histories of colonial capitalism and their material presences in contemporary worlds. The film is accompanied by a keyword glossary, titled A highly Partial Field Guide to British Canals, introducing some processes and beings prepared by Heather Swanson and Sonia Levy, which you can find on our website. This event is a collaboration with Radar of Loughborough University and shortly Radar's producer Laura Purseglove will continue with a separate introduction. Our live programmes open up different interventions and propositions within our curatorial research across the organisation. And this event expands on our current research strand, Emergency and Emergence, a multiplatform programme that unearths transdisciplinary sensorial and speculative practices of radical sense making and wayfinding via questions or repair, pedagogy, remediation and mutation to investigate how to move from crisis to renewable, from emergency to emergence. Some very brief housekeeping notes before I introduce our quests, our live programmes of talks, performances and screenings seeks to create challenging environments, where open mindedness and respect for each other's approaches and perspectives can foster growth, so please be mindful and respectful of each other's opinions and views. We will keep an informal atmosphere throughout the evening. And although interaction with our audiences is limited in today's digital formats, we welcome you to join the conversation. You can use the chat on YouTube to write your questions and comments throughout the session and Filipa will be asking those to our speakers. Our session will last approximately an hour and 30 minutes. I will also like to take this opportunity to thank our partners,

the University of Nottingham and Nottingham Trent University for their generous support of our programmes, as well as my colleagues Helen Hamilton, Jim Brouwer and Shannon Charlesworth for making this event possible. As with all events here at Nottingham Contemporary, today's event is free to attend so all donations are greatly appreciated to help support future free programmes. Please donate, if you can, and are feeling generous this evening. So without further delay, I'm very pleased to introduce our speakers. Sonia Levy, is an artist and filmmaker currently based in London. Actually today joining us from Venice for her residency there, and her practice engages contemporary sociological urgencies at the intersection of art and science. Through this co-becoming of disciplines, she uses filmmaking to guery science's history of entanglement with the logic of Western colonial extractivism. Her work attempts to develop new practices of care that foster dialogue as a means to consider new worlds. Heather Anne Swanson is associate professor of anthropology at Aarhus University as well as the director of the Arhaus University Centre for Environmental Humanities, with a long standing interest in fish, rivers and oceans. Her current work broadly explores how political economies and ecologies are intertwined. She has been a founding member of several research groups that focus on transdisciplinary methods and collaborations among the natural sciences, social sciences and arts, and is a co editor of Domestication Gone Wild: Politics and Practices of Multi-species Relationships. published by Duke University Press and Arts of Living on a Damaged Planet, published by Minnesota University Press. Her newest book Spawning Modern Fish: Transnational Comparison in the making of Japanese Salmon is forthcoming from University of Washington press and will be published in August 2020. Filipa Ramos is a writer and curator with a PhD awarded from school of critical studies at Kingston University London. Her research manifested in critical and theoretical texts, lectures, workshops and edited publications, focuses on how culture addresses ecology, attending to how contemporary art fosters relationships between nature

and technology. She is the director of the contemporary art department of the city of Porto. Furthermore, she is the creator of The Art Basel film sector and a founding creator of the online artists cinema Vdrome. Ongoing and upcoming projects include the arts, humanities and Science Festival, The Shape of a Circle in the Mind of a Fish since 2018, and Persons Persone Personen atGherdëina the eighth biennial Gardena both with Lucia Pietriusti. She lectures extensively in the fields of contemporary art and ecology. She is a lecturer at the Master programme of the Art Institute of the Fachhochschule Nordwestschweiz in Basel, where she leads the art and nature seminars. I'm going to hand it over to Laura now. So without further ado, the screen is yours, Laura. Thank you.

### 08:04 Laura Purseglove

Thank you, Canan. And I'm just pleased to briefly say a little bit about the Radar programme through which this film was commissioned. So. Radar is a commissioning and research programme based at Loughborough University which creates opportunities for artists to work in collaboration with academic researchers. Radar produces a programme of commissions and critical debates, which is produced by my colleague David Bell, which invites artists to engage with research and develop new work. Our projects often engage with the two kind of contexts of our campus - the lights just going off in my room - so in East Midlands and in London, and they're also often hosted by our institutional partners across the UK. The work we produce is performative, participatory, and process based and Radar projects are very much cross disciplinary and favour collaborative models which seek to advance the ways in which we think about research. Recent Projects include Bodies of Knowledge, a programme departing from a series of artists led workshops, exploring the human body as a site for the production, retention and transformation of knowledge, and our current programme **Ecological Thinking, which asks how artists and researchers** might think and do ecology differently, considering the

colonial and enlightenment modes of thinking which have underpinned the study of ecology, and asking how a more porous approach might help to collapse those binaries and boundaries, which maintain the hierarchies we want to erode. Creatures of the Lines was commissioned in 2019 as part of Risk Related, which was a programme with which we wanted to engage across the university, in almost every department, thinking about risk, from the existential risks we face, politically and ecologically to the intimately connected wavs in which chance and risks dominate the logics of global finance. But while also sort of holding on to the ways in which chance and risks have been central to modern and contemporary art, and hold potential for new kinds of wavs of thinking and modes of being and Creatures of the Lines does exactly what we hope these projects will do, and really operates to cut across subject areas, makes connections between ecology, capitalism, colonialism, and absolutely sort of embraces the idea of risky methodology in the way it's made, and the sense of kind of filming underwater being very much about sort of chance encounter. So collaboration with academics is really central to Radar commissions. And Sonia spent time with professor of eco-hydrology Paul Wood, engaging with his research on invasive species in canalways. So the so called killer shrimp that you can read about in the Highly Partial Field Guide to British Canals that Canin mentioned. So from those kind of early days, surveying species in the canals with Paul, Sonia, and then working with Heather, really, over time grew this project to kind of think really broadly about shipping and trade and how that kind of disperses these species so widely across the systems of canals through movement, and gets into these really kind of knotty connections between colonialism, capitalism, and intensive agriculture, that all sort of come into focus in this film, through a sort of embodied by the creatures of the lines and the worlds they inhabit, so we're just really happy to have commissioned this film and to see it screened today. So thank you.

## 12:31 Sonia Levy

Hi, everyone. Thank you, Canan, and Laura, for this introduction. And thanks, everyone who's joining in this evening, So, yeah, Heather and I will now present some background around the work. And just as we begin our talk, we just want to first acknowledge the world around us suffering in many ways, ecologically, as we discuss today, but also from other unacceptable violences, including those of wars. So I will now share my screen. Yes, it's working, I think. So yeah, we'd like to thank Radar Loughborough and Laura and David Bell and Paul Wood and Simon Guareschi and David Ryves and their students, Sarah Evans and Daniel **Gschwentner from Loughborough Geography Department** and the many collaborators and friends who have helped us and worked with us along the way. Their generosity and feedbacks have also made this film possible. So as Laura mentioned, the project was commissioned by Radar and it draws on conversation and collaboration with physical geographers from Loughborough University, looking into current socio ecological concerns affecting UK water bodies. And so as issues around newly arrived aquatic species in manmade water bodies and how canals are facilitating the dispersal and spread, as well as the increased eutrophication of British waters, the process by which nutrients accumulate in aquatic habitats, tied to the use of agricultural fertilisers runoff as well as through sewage discharge. And we will explain both of these in more detail later. So those were issues that are brought to our attention by our collaborators from Loughborough University. As part of the project we also conducted a scientific study on canals, and under UK law canals are largely unmonitored and are still managed as infrastructure of transportation. So this results in very little knowledge about these water bodies, even though they have substantial ecological effects as they pour into adjacent rivers and streams and often connect previously separated watersheds, facilitating pollutant and organism dispersal. So, we conducted a biotic survey into canals comparing different assemblages or microinvertebrates, found in

different parts of canals in London. And we are currently still processing the data and optimistic that will give indication of canal water quality with certain species acting as biological indicator, as well as habitat structures because particular organism only reside in specific condition and in relation to specific habitat, so, certain plants or substrates, and also we hope that you would give indication of biotic potential biotic homogenisation, which means the decrease in locally distinct biodiversity, which is a phenomenon that is accelerated by extinction and species introduction, as well as by the smaller number of species that can live in waterbody like canal, which is morphologically and ecologically guite unusual. And many of our samples contain, introduce organism who were not previously documented at these localities. The framing of the project draws on my collaborator Heather's work and her research group on ecological globalisation. And I will hand it to Heather to explain in more detail this project.

#### 17:00 Heather Swanson

Thanks. Sonia, and thanks to everyone who's made this event possible. Creatures of the Lines draws its academic inspiration, in large part from a research group I had funded by the Carlsberg Foundation, which focuses on what we call ecological globalisations. That research group is interested in how political and economic processes come to link spatially distant ecologies in various ways. For example, we're interested in how commodity chains shape landscapes through extraction, how the movements of nonhumans are remade through human activities, how models for infrastructure building travel among countries, and how circulating desires for growth and modernity remake places. How we ask, do everyday political and economic acts come to shape the sinews of our worlds, the fibres, tissues and forms of its lands, waters and bodies. Creatures of the Lines takes up these multiplicities by trying to shift dominant framings of invasive and introduced species, which often tie the risks of species introductions and ecological disruption to newly arrived organisms themselves. In contrast, we seek

to explore how the risky entities that most fundamentally disrupt aquatic worlds are not these organisms as such, but rather infrastructures of shipping, trade and waterscape modification. The structural processes that scramble aguatic worlds, and remake land water interfaces through channelisation and canal building. Today, Britain is criss crossed by over 2000 miles of canals. For the most part, these canals are not improved rivers, but channels dug specifically for the purpose of transport. One of the ways they upend freshwater environments is by connecting them to distant oceans. Ocean vessels frequently carry organisms, from plankton, worms and algae, to clams, mussels and jellies, on their hulls and in their ballast water. With the canal networks. introduced organisms do not remain at coastal ports, but are pulled deep into freshwater environments by the movements of smaller boats, as well as by the canal's physical form. Because the canal network connects so many of England's river basins, introduced species are able to quickly spread through them and across the country, displacing others and leading to decreases in biodiversity. The very form of canals facilitates the proliferation and movement of introduced species. Canals are made for efficient conveyance and commerce, straight with hard banks, and routine dredging to keep them navigable. Such conditions are inhospitable to many organisms, creating worlds where only a limited number of creatures can survive, such as the introduced zebra mussels who flourish on the concrete edges of docklands and canals. We do not see this spread of introduced species as a story of aggressive invading organisms, but rather as a story of waterscapes, remade by the structures of transoceanic imperialism and global shipping. To offer another example, as Sonia mentioned earlier, the canals in the film suffer from algal blooms, fluctuating levels of oxygen, and disrupted ecological webs due to eutrophication or excessive plant growth. When waterways are flooded with nutrients, primarily nitrogen and phosphorus, it's first aquatic plants and micro algae communities to proliferate, giving waters a vivid green hue. Rather than seeing eutrophication merely as a technical

pollution problem, we approach it in a more expansive geographical and historical perspective, a move that brings eutrophication into view as an emblematic example of wider structural forms. The most significant cause of eutrophication is a dramatic increase in fertiliser use in England from the 19th century onward. Once derived from nutrient fixing legumes and animal dung, nitrogen began to be imported from sites such as Peru's quano islands, and later produced within post world war two factories, whose outputs were converted from bomb materials to agricultural additives. Phosphorus initially came from Pacific islands forced into Imperial relations with Britain, and more recently from Morocco. The histories of both nutrients extraction, shipping and use within monocrop agriculture, which has both made and fed urban growth, have become literally embodied in canal ecologies. In this way, they offer a key example of how industrial processes seep into the world's metabolism. In a related vein, Sonia and I also build on the ecological globalisation project's commitment to thinking with material worlds, in particular, its focus on material transformations of land waterscapes. This focus on materiality matters for how we invoke lines in the film. We do not see lines as metaphors or mere concepts. We are thinking about them as material forms, as canals, factory lines, crop rows, and is bound up with other material tools, such as the lines of the accounting ledger, and the survey equipment of the engineer. Although very interested in and respectful of the multifaceted human worlds of canals, like the labourers who built them, current longboat dwellers, in this piece, we made a specific choice to focus on the infrastructures of canals in relation to their non human denizens. Although in future work, we may expand our scope. Overall, the film was inspired by various scholarly trajectories, including more than human anthropology, Marxist feminist geography, and feminist science and technology Studies. Another aspect of our work is a commitment to encounter-based methods. Rather than knowing the subject in advance, we allow the key questions and topics to emerge via joint work, following the flux of the world, rather than having a straight line plan

from project start to finish. Instead, we're intentionally slowing down working with seasonality and cycles. And thinking through these questions, we have put an emphasis on collaboration. By working together we seek to join the speculative open possibilities of art and its attention to aesthetics, with a thick description and play space noticing of anthropological traditions, along with the noticing practices of natural history and aquatic ecology, the latter thanks to the help of Paul Wood. For us, there is a sense of urgency. We are stumbling to learn more about the confusing worlds and ecological dilemmas with which we're entangled. And we hope cross disciplinary collaboration might help us to explore new ways of sensing, noticing and experiencing lines as a first step towards transforming them into more livable, and more curvy and meandering forms. Another key method for us has been historical research, which due to COVID 19 largely meant engagement with digitised archives and other online materials. We do not approach history as in the metaphor of sedimentary layers of tidy, organised accretions. Rather we see histories like the actual sediments of a canal, churned up by passing boats, dredged, continually resuspended ingested by clams, and saturating bodies and waters. We thus present nonlinear historical fragments, to emphasise how histories and presence are bound up with each other. In other words, how pasts are not past. We also focus on histories in form. like those in the physical brick and mortar of the canals, to emphasise, drawing on the thinking of anthropologist Ann Stoler, how the debris of Empire is not a collection of ephemeral traces, but of seriously durable imprints and lands, waters and lives, human and nonhuman. In our efforts to have robust citation in historical detail, we decided to develop the document that accompanies the film with keywords and bibliographic sources, which we hope you've had a chance to access. I now pass the word back to Sonia to say a bit more about the project's filming practices. Sonia back to you.

26:03 Sonia Levy So, throughout the project, we have attempted to think

underwater from the murky thick and submerged sites of canals and their unsettled layer of socio ecologies. Most of the film attempt to bring seldom seen sights of the underside of London's waterway, a laborious process involving the development of an underwater camera system. We wanted to disrupt some of the practices of representation embedded in lines of progress in the making of canals, the reshaping of the world for Imperial and production projects. So how, for example, watery spaces have been defined by the West as the other than reason in opposition to the terra firma, the stable ground on which enlightened rationality claims to be built on, or equally how it was cast as ahistorical empty voids, rendered flat surfaces of conquest and accumulation. In place, we wanted to repopulate and give depths back to these watery spaces. Another practice of representation embedded in lines of progress we wish to interrupt is the view from above, the God's eye view of traditional cartography and surveying, which played a part in the making of canals and the rendering of the world amenable to the modernist plan. So a disembodied position sorry, disengaged for the materiality of the world, and the extraction imaginary of this position has made terra nullius out of landscapes, land and waters ready to be conquered and grabbed, erasing the words and worlds of others. As a reaction against this position, we want to represent what it would mean to be immersed in the world, entangled with the work of other living beings. We want to represent an unfoldment in the cycle of the earth. That said, we don't regard immersion as inherently liberatory, or water as a substance that necessarily dissolve selves and structures. Instead, we want to think about the specific ways the materialities of watery world have and are being shaped and transformed. So I'll just add a few words about some of the creative and filming practices that have informed my thinking and aesthetics around this film. The work of filmmaker Jean Palive and Jean Dievamot, and their early cinematic and aquatic tales where the scientific cross experimental filmmaking, and the work of anthropologist and filmmaker Trinh T.Minh-ha and her practice of speaking

nearby as opposed to speaking about, so to not speak from a position of authority, and to attempt to work without grabbing, capturing or enclosing, in order to instead let things come to oneself in all their liveliness. So throughout the film, we have attempted to develop methods and ways of knowing, but also retelling and representing these confusing worlds and ecological dilemmas with which we are entangled. The muddled, the perturbed and the uncertain were a notion we developed and attempted to include in our ways of approaching the field and the filming as well as a notion we wish to be embodied in the language and aesthetics of the film. So thank you, and now that we've put these main ideas and methods on the table, we very much look forward to beginning our conversation with you Filipa.

### 29:56 Filipa Ramos

Hello, I was are we meant to start reading just because I, okay, good, thank you. This was an extraordinary presentation, Sonia, Heather, it made my my role guite redundant, because you need very little moderation, for your thoughts and ideas and the sharing of your joint process of work to emerge. And maybe I see my role here as in asking some questions that tell us more about the story of this project, which I think is always interesting to see how it emerges. And while I was now listening to you, and also rewatching, the film this afternoon. something that occurred to me in a very vivid way is or it how, or it's something that emerges very clearly from from the work that you made together is how ecology is an aesthetic issue in the sense that you, your research attests very clearly to how the transformations, to the consequences of these systematic transformations of landscape, these gestures of straightening of conceiving a line and a vector as a system that is more efficient, more profitable, and also form and the shapes that are more efficient, when therefore, how it is so important to approach the complexities of ecology also taking into account its aesthetic resonance, or its aesthetic roots. Our transformation of our landscape leads to a radical transformation and an environment and in the relationships

that life forms established with those environments. And having said this, I would be very curious to know about the beginning of this process, how this project came into being what, let's say what was its initial line of desire, line of inquiry and ambitions and how this also, this very happy collaboration between the two of you came into being so how this if you want to tell us a little bit of the story of the birth of this project?

### 32:54 Sonia Levy

Should I say some? Okay, I'll start, actually, what you just said, thank you so much for this great comment actually reminded me about a paper that Heather has written that also, for me, was really important in inviting Heather in the project, and which is about her idea about the banality of the Anthropocene. And I wonder Heather also if you want to say something more about that, how also and what also in a way drove did this project was that we are confronted with those changes, but we don't always have, we don't always see them. They become sort of invisible. And I think the gesture of filming underwater in canal was also because of that, because we don't often see canals as living entities with life in them. And I think I was really interested in reversing that. Yeah, and maybe Heather you want to say something also about yeah.

#### 34:16 Heather Swanson

Yeah, thanks. I mean, from my part, I was simply thrilled when Sonia approached me about this project and with the opportunity to collaborate because it was a real privilege for me to have that chance. And I think it is precisely the chance to work with an artist who was able to do what Sonia just mentioned, to take that everydayness of these aesthetics of straightness, of linearisation, and to make those seem overlooked, the ordinary, to make that ordinariness strange and to make it to make it visible so that it's engageable and discussable in a different way. And I think that I mean, we also have to remember that these everyday structures, they're

not inherently overlooked. They're just made so abundant that they no longer, that they become normalised into the landscape, but there isn't anything inherent, like, inherently given, indeed, they are strange. But that these forms, such as canals and linearisation in our landscape have just proliferated to the degree that we take them as ordinary. So bringing back in that a different sense of attention to them seems precisely one of the important ways to engage the ecological challenges of our times, that sense of denaturalisation.

### 36:19 Sonia Levy

Yeah, and I think that's what also working with Heather has been so incredible for me and has really challenged my thinking is because the way sometimes you your phrase, like those structure that we saw that are so normalised that they actually maybe world that shouldn't be, and that also changed my approach to them and how I wanted to engage with them. And what I wanted to say.

### 36:51 Filipa Ramos

It's super interesting what you're saying because it's making me think, while you were speaking Heather, it was making me think how we have been brought up in a world where grids and lines, straight lines because lines can be curved as well. But we have we have been so much used to a system of grids and of straight lines that they almost naturalised themselves not only in our visual culture and in our visual relationship to the world, but also in the ways in which we conceive our processes to think, websites, system architecture relies on grids as well. The ways we communicate, the ways we organise our thoughts and how, there is a semiotics but also a visual culture of the grid and of the line, that it naturalise itself as a system, both of efficiency, but also of control and of dominance. And if we think about mechanisms to for instance, well if we think how different disciplinary ambits use the grid, from archaeology to study of film, to studies even in ecology and environment, I'm thinking about a text that

Bruno Latour wrote about soil researchers and how they do this research by creating grids. It all of a sudden, we realise that infrastructure, both major as the construction of canals and of wavs of transit and circulation distribution of goods. but also minor infrastructures are genuinely relying on this on this very, very coded and very, very imposive and dominant system of, on this geometry of lines. And then and having said this, very often the system is also used to control from above and to see from above, and Sonia before you were exactly mentioning how important it is to go back to the ground, go to the mud, a little bit like Donna Haraway mentions that she feels she's a creature of the mud. And to give a perspective that is muddy as we are right now, that we we all have this. We're all literally embedded in the muddiness of the film. And I was curious, while you were describing the process of conceiving the visuals of the film, I was actually very curious about the very down to earth pragmatic aspects of filming, of making this film. Can you tell us more about how the cameras were installed, where you choose the locations where these cameras were placed, or if they were already there, because the cameras are super interesting exactly by taking us outside of these grids or inside, let's say, the lines and making us watch exactly what is happening. So it would, I would be really, really curious to know more about the materiality and the practices of the camera work in the film.

## 40:26 Sonia Levy

Yes, thank you. So the camera I developed, a quite simple system in a way, my camera is housed in an underwater camera system, and I'm above the water, holding it with a pole. And it took a really lot of take, of course and to find the right, yeah, to find the right way to make this this apparatus work. And then finally I had, I found a way to have a live view. So that really helped and also very practical thing, but also see what I was filming while I was filming it and discovering it and being able to frame and that raised that, of course a lot of other questions about framing, about thinking about what it means to capture destruction and the sort of aestheticisation

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of, of that destruction and how certain images look so painterly and so romantic sometimes. So this was always in the back of my head when I was filming. But I really tried to spend as much time as possible and see through different conditions and different weather. And yeah, what the canal waters have told me and filming underwater has kind of teach me is also that it's not like you have to be not only extremely patient, but you as I was also alluding to earlier, like you have to let the world come to you, you cannot ask the world to behave a certain way. And that was how also I wanted to approach the film of course, but there is a forms of weather on the water, there is days where the visibility is really bad sometimes, of course, because it has rained, but from sometimes for reason unknown. So that was really, really interesting. And seasonality was also really important. And in terms of choosing the location, they were also linked to the location where we did the scientific survey, which were some basin that had very different morphologies and that were treated guite differently, some in areas that were much more urbanised and that look at least from outside, potentially more damaged or polluted or more full of detritus. And then others where there would be attempt at planting replanting the edges. There was also, so I was also really interested to follow to follow that line from the from the container port to the River Thames to the entrance of the canal system. So there is all that section that was filmed also in London, in Canary Wharf in London Docklands and I was incredibly interesting and difficult to get also a permit to film there obviously, I couldn't go anywhere I wanted. And the ecology was so so different as well. Much more deep. And so, yeah, that's that was part of how I approached the film.

## 44:20 Filipa Ramos

Thank you and Heather, I was also curious to know what was your relationship to the production of these images and to the encounter with these images if they are because they're so outlandish somehow and so fantastic. I feel like I could be in the Martian world. And so maybe it's because of the greenish

nature of them. But I was wondering, aside from the aesthetic encounter, that maybe it's the one I have straight away with the footage I'm curious to know, maybe I'm just simply curious to know how an environmental anthropologist or an anthropologist deeply rooted in ecology and environmental matters looks at this footage and relates to these visuals we see in the film.

#### 45:28 Heather Swanson

Yeah, thanks so much for that question. I think the first answer is, unfortunately, because of the timing of the filming in the depths of COVID-19 lockdown, I wasn't able to be present. But our original vision was for this to be jointly ethnographic and cinemagraphic fieldwork, so that I would have been there in the field as an anthropologist, at the same time that Sonia was doing the filming. So I did encounter these, I did encounter the canals in this film, in the filming period, largely through the filmmaking, through Sonia sending reams and reams of video imagery for me to engage. And it was both a bit strange for me as someone who was schooled in methods of intimate encounter to do that digital work at a distance. But I think it was also it pulled me into a different practice of noticing, of paying attention to the details in the filming, to asking questions about the textures and materials on the side of canals, to asking Sonia questions about the routes, to asking, what was this? And what was that? And so I think there's a way that the constraints of that moment also brought us into a different kind of dialogue, where I had to ask all kinds of questions from my disciplinary background, like, I was really shocked by the eutrophication, like the degree of eutrophication, the water is, as you said, so profoundly green, which was part of the process that I mentioned, the eutrophication I mentioned earlier to see how much you could really see that in the water. I think, you know, we were also very interested in the way that Sonia you can say more about this, the snails were particularly on plastic substrates for example. And I think that it was also the video work was also bringing us into deeper and deeper conversation with Paul,

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with Paul Wood as well. And I think I think there's also a way that the footage made me slow down in a really productive way. Because precisely it's encountered that is produced in sort of these like patchy fragmentary moments like Sonia said, with multiple takes and different places and partial failures and partial successes with the filming, disrupted the sense of being able to do a project from start to finish, which that idea that you start a project and you know exactly what you're going to do and then you work through it systematically and you get to an endpoint is in itself a form of that straight line thinking, where you have a neat and tidy narrative line that goes from beginning to end. And I think the very process, Sonia's very process of filming brought us into a different type of space of dialogue and engagement, where we could produce new conversations.

### 49:25 Sonia Levy

Yeah, can I just add something briefly, I feel like what started to happen is that actually, the images at filming became at once methods and processes to study those worlds. And then they became part of the film as well. And also partly this was due because Paul Wood which engaged with us, which is the eco-hydrologist who worked with us, again, because of COVID, we were supposed to work more closely with him and on different canal system couldn't be present either. So in a way it forced also another, another approach and other methods to get to know those waters with the camera.

## 50:30 Filipa Ramos

Okay, here we are sorry, I was seeing the slides where I was understanding if we were meant to continue. Thank you. And it's not only images, but the sound of the film is interesting. The sound, both the sound that emerges from these environments, as well as then, and we go there to the layers of voices and of narratives that also take us to different times and different moments. Adding an element of, adding in or diluting what is actually science and what is fiction in a way. But I wonder if you could tell us more about how you edited

the sound, how you worked with the sound? What was your interest in creating this, very layered at times, very material, and very situated sound and the sounds taking us to other moments and times?

### 51:42 Sonia Levy

Yeah, so I recorded as much as the most of the film is on the record as well with contact microphone I actually a little bit above water around water. And so yeah, it was about having all those little details and being able also to have the sound where I filmed. So for example, we went to Canary Wharf where there was those edges completely covered with Zebra Mussel and recorded there and have this like crackling sound. So, to also, even though the sound was not necessarily recorded, and was then composed on top of the image later, it was really important to have the sound that the creature produce or the sound of the specific localities. And what I try to emphasise a lot also is there's a lot of like, working construction sites and metal noises, which, for me became also the sort of it is like also the soundtrack of London, this city that is constantly being built and all those buildings that are being erased and and the concretisation, this constant concretisation of the world and this constant re-making. So I wanted to be to have that really also materially present in the work and the soundtrack of the work. So we had, we went also to a space near Canary Wharf where they just were doing this really big construction site and were able to record that underwater so they're not sound they were sort of transformed, but there really record there underwater. And then there's this other other layer, which is the voiceover. And maybe Heather could say a little bit more also about the choice, the choice of those poems, and those texts. And the idea here was to bring more a historical perspective also on canals and also the sort of hauntings of those waters and the attempt was also to at once animate some of those archival voices, but also see how they are still sort of present in those waters and they're still the sort of distorted and actively present there.

#### 54:53 Heather Swanson

Shall I just jump in on Sonia's question, yes. So yeah, just to follow up quickly. It's precisely as Sonia just started to explain that we were interested in a sense of history as being churned, as being present in the canals, that history isn't something past. But it's something that is in the present yet it's not in the present in this, it's not a linear history where you can everything is you know, accreted in accreted sequences, but that the history is churned, and this and thrown up and with there, definitely, it's there yet, it's not in a neat and tidy arranged straight line fashion. And so that's why we have lines of a poem, lines of poetry, that come back in these patchy ways and that are spoken in different ways throughout the film. And just, hopefully, people have a chance to take a look at the accompanying PDF, but we tried to pick pieces that were very relevant. So there are 2 18th century poems, one specifically references British, British, is inspired by British canal. The other is about a moment of trade that is contemporaneous with this large period of Canal building and increase in shipping. The other is from a different temporal period, from 17th century reflections about drainings of the fens, which was another moment of canal building and drainage in England, but in sort of a different phase than the canals we're looking at. But yet also, there were technologies and echoes across those projects as well.

### 57:02 Filipa Ramos

Thank you Heather, it's fascinating how I don't know what's the I mean, each spectator has a different experience. For me it was, I saw the film before knowing the genealogy and different textual sources that emerged that the text presents, and in some of them, almost like I remember, the first time I saw it, the opening voice seemed almost like a curse, or like a prophecy more than a curse. And others then seem to tell about a present and the language is clearly from a different moment or from a different space, but it tells something that we can recognise very closely in the present. And I thought

it was so interesting, then learning how the sources, some of them remote to centuries past, or most of them, how they seem exactly like prophecies or they seem to announce what we're living. And so, maybe just wanting to go a little bit deeper, or stay a little bit deeper with the oral aspects, and now going from from the sound, we may go back, because there's also a question in the audience about it. But staying with the oral aspects of the film, can you tell us more about the research that was made in order to include these texts and these fragments in these very unique accounts that tell histories of trades, of unfairness, of transformation of landscapes and people and, and all different living forms that you made and that become so incredibly lucid, but also so outlandish in relation to the images that we see in the film?

59:13 Heather Swanson
Son can I just say a few words about the research process?
And then I'll pass it back to you?

59:17 Sonia Levy Yeah, of course. It's more. Yeah.

#### 59:20 Heather Swanson

But I think so for the, for the research. This is such a tiny, tiny bit of the research that went into this. What we did, I mean, one of the things is that this is a time period and a place where there is no shortage of sources. So there's quite a lot of secondary literature on canals. There's also quite a lot of primary source material, people were writing manuals about canal building. They were writing, soon after they were building right after they were done, they were writing tourists pamphlets, or sorry, like as the canals changed shape there were also like travel guides to the canals, there are industrial, there are records of the shipping that was happening on these canals. There, there's, in Britain, you have excellent digitised newspaper, historical newspaper archives. So there's just a wealth of sources. And these are just some of the examples of materials we were using. There are also broader primary

source treatises on canal building in other places. For example, when Britain was building, or when Britain was involved with the Suez. There are a lot large number of, there's a large number of British reflections on the Suez, and its and on like the engineering of ocean canals, as well as Brits were also writing quite a lot about the Panama Canal. So and when they were writing about these new canal projects, they were also often reflecting on inland canals. So you can also read sort of, from like the 19th century reflections back to the 18th century, and so on. So we were reading across a whole wide variety of sources, of which and then the question was, which ones would best, would come together aesthetically, with the imagery. And so Sonia, maybe I'll pass it back to you to say a little bit about these particular pieces.

### 1:01:53 Sonia Levy

Yeah, there's three poems in total. And there's two poems that are one is specifically about canals and canal building, which is the the one at the beginning. And the other is more a sort of, which is more about trade. So we wanted to bring those two in relation as well, which was, I think, yeah, which was not easy at the beginning to find something that would evoke both of those at once. The sort of glorification of trade, and the one about canal was a little bit more, had a little bit more ambiguous, but still, there is still this yeah, this glorification of the project and the sense of the scale of the work. And the change in the landscape that happened at the time when it when the canal were dug. And then there is the poem that comes in the middle, which is not with the voice, but just with the subtitle, which is the poem that Heather mentioned. which is a 17th century poem, which is related more to the draining of the fens, but we thought it was an interesting sort of lineage of hydrological modification in Britain to bring in. And also, which is also like a first voice of concern in a way that we also thought it was interesting to bring in the work, to yeah, with the work we're doing to also raise the fact that those ecological changes for even in 17th century had already people that were, that were questioning such projects. And

indeed, as you said, Filipa, it's incredible to hear how they still feel so contemporary. Yeah.

### 1:04:12 Filipa Ramos

Thank you. There is just to continue a little bit on the sound there is someone who is interested in more in knowing more specific details about the sound. And I'm going to read she asks, I'm curious to know how you negotiate sound and the sonic imagination in the work, how the vibrational permeates, persuades, challenges, informs our accepted ideas of time, space and such? I don't know who of you want to go there? You can you can find I believe that the question the chat if you need to reread it.

### 1:04:53 Sonia Levy

Yeah. I think that with the challenging the idea of time, I think we were sort of talking a little bit through that. But I think it was mainly through those voices in those poems that we will try to have a sort of echoing or reverberation or hauntings in the water, suspension, like the thickness of time and of pasts that are not past, that are not gone still very much within those waters, within us. And I mean, as I also mentioned before, I think I really try to bring forth this sort of reshaping, transforming and constant sort of tapping on the earth and concretisation of the earth that I really wanted to bring that in the soundtrack together with all the grandiosity of the little creatures we managed to capture, the fishes clicking and the muscle filtering, and all of that, so.

### 1:06:33 Filipa Ramos

Thank you. In the sonic aspects of the film, but also in the visual ones, something I find extremely compelling is how it very naturally attests to the distinction between, let's say, the synthetic and the natural. To the extent that in some fragments, you don't know, and you don't even need to know, if you're looking at a living or nonliving form. I'm thinking specifically, there's a, an initial moment in which, like the body of a clam is filmed. But it could be a cloud, it could be some

dirt, it could be like a violet body appearing in the screen no. And it's so curious since we've been, I mean, it's been so long now that we keep asking ourselves, who is the responsible for the major cultural divide? And how can we contribute to bring back this delusion between the two. And all of a sudden, in the short film, that becomes very clear that this distinction, even in terms of perception, is not that clear, and is blurred no? And therefore, I don't know if this is really a question, but I was very curious to know, your relation to the production of images and to the encounter of these bodies, of these movements, of these forms. That exactly because they are in murky waters, because they're in the mud, because they're in an area that is so alien for us and weird. And I love that you finish the glossary with turbidity as the like the closing term that defines where you were and where you took us in this film. So I was wondering if, if you want to tell us more about the relationship you have to these manifestations of the living and the nonliving that seem to so happily coexist independently of any of the differentiations that we we need in order to make sense of the world

1:09:18 Sonia Levy Should I start Heather or? Thank you Filipa, yeah.

## 1:09:26 Filipa Ramos

Or if you want to just practically if you tell us a little bit about this incredible clam that looks like a ghost and looks like an octopus but also looks like some blob of metal.

## 1:09:37 Sonia Levy

Corbicula. Yeah, what I can say me maybe about also which is another way that I encountered is relation between living and non living is, in my engagement or like while working well, while filming is I, how can I say that sorry? Well, first what working with canals taught me, and I don't know if it's gonna make sense, but I realised that life and I realised it bring forth this idea that life is not an exception on the earth, right? It's the, it's the condition. It's the very condition of the

earth and so it's always surprising, and I don't know in a way why, but how life still can exist in those margins in a way and how it so, leaving the camera for a certain number of hours or then suddenly also, you start seeing things moving that in places where you thought it was just a pile of dirt, and there were no insect or nothing, or how specific detritus become very good habitat for certain snails or so, all of that was really interesting and also reinforced this patchiness and kind of like three dimensionality of that space was every surface, every different, if a brick is put somewhere, then it becomes a specific sediment for a specific clam. So that was extremely kind of revealing and interesting. And I think there was some sorry, trying to gather my thoughts. There was this idea also that Heather and I talked a lot about, which was the idea of the complexity also of thinking sometimes about plentiness and the plentiness of life in spaces like that, where you would think there are no life and what kind of life you find. And the idea that because they are eutrophic waters, because they are very productive, then they can have a lot of a certain kind of life in them. And that is not necessarily a sign of good health of the body of water. So plentiness is not necessarily a sign of health. And that was interesting to think, because eutrophication means overproduction. And the relationship with production system and so well, that was interesting to think with.

#### 1:13:16 Heather Swanson

Yeah, I was just going to jump in and make exactly the same point you did at the end there, Sonia, which was about we really struggled with this question of how to engage with the abundance in the canals because it's, for the most part, they are full of creatures. But they're often abundant in number but few inkind. And how to engage with that visually, to show the abundance, but also to show that the species diversity is often quite low, that you're only seeing two species of fish, even though you're seeing large numbers of fish and how to really engage with those complexities in the project, that it's neither a story of extinction and utter paucity, but of a type

of simplification, and that the simplification isn't just the structural simplification and the straightness of the canal, but also the simplification of the lifeworlds within them, so there's still this abundance of life, but at the same time, it is a limited and restricted, it's a limited and confined world at the same time.

## 1:15:07 Filipa Ramos

Thank you Heather, and that we have two other questions and before reading them and then slowly steering towards a conclusion, I have a question in relation to what you were mentioning, which is also an important feature in the glossary, which is this notion of the monocondition no, and the ecological simplification, and my question which is very present in the film, and also in a series of exercises and of reflections triggered by groups such as Feral Atlas, and also touched upon in the monsters and ghosts and the Figures of the Anthropocene book, which relates to how do you think it is possible to attend to these life forms, to these animals, to these different creatures, and to their resilience and resistance? And at the same time, how can we prevent ourselves to turn them into incarnations of the situations they resist to, I'm thinking, in a more general relationship to our lives, and to our daily encounters with pigeons, for instance, or with rats, these are animals that have resistance, that are resilient. And at the same time, they attest to a modern condition in which we have depleted our environments of the diversity of life forms, and only those who resisted or who were capable of adapting in terms of survival can actually thrive no, and how can these creatures, how can they not be personified, these monsters and these ghosts of the Anthropocene and instead be seen as a symptom of the actual monsters, which are the infrastructure, the currents that we create, and that could generate the conditions for this simplification? I don't know if my question is very clear. I'm basically asking, how can we, how can those living forms not become tropes of figures that stand for the problem that they find themselves enmeshed in in their plurification, in their

proliferation, and in their existence?

#### 1:17:46 Heather Swanson

Yeah, I mean, I think it's hard. I think it's a great question. And it's the guestion that we've been trying to ask in better and better ways, but it's the question that we're still asking. But I also think, you know, it's a general question that we often have in context of industrialism and capitalism. Because we're struggling with this. I don't want to make a simplistic parallel between human worlds and more than human worlds. But I think when we're talking about capitalist dynamics, there is a way that we know in human worlds, for example, that we end up with the stories of the self made man or the individual who has to be resilient. Yet we know that those stories are radically insufficient for life in our times, whether you end up you know, that our lives, and our successes and failures are not, are very rarely personal, and very much bound up with the structures with which our lives are entangled, and they're very, they're very not, they're definitely not individual. And we're still learning better and better ways of discussing that. And I think there's something although we're dealing with a very different situation in a very different context. And it's not quite a parallel struggle. It's not quite a parallel struggle. That there is a similar way that we want to focus on the structures and the structural conditions, which is part, which is precisely why we didn't want to focus on invasive species per se. And, you know, we really didn't, we wanted to move away from the type of conversations that are either about celebrating the resilience of the species, such as pigeons that adapt or demonising say the killer shrimp because it's, there's, you know, there's nothing demonic about the demon shrimp, which is another sort of like this, or nothing killer about a killer shrimp per se, these are not like evil beings. And the same as that there's nothing, yes, there's a degree of creativity to pigeons that we want to celebrate. But these are complicated, complicated issues. So instead, we really wanted to focus on the morphological changes and the changes in form as a way of thinking about the types of repair that just sort of bring into

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spotlight, a mode of thinking that would lead to different, that would lead toward lean towards some of the conversations about modes of repair, where what would it mean, to make more curvy and sinuous worlds that would then support different assemblages of being? So I think that's what we were trying to highlight in our choices. But yeah, they're, they're difficult questions with no easy answers.

### 1:21:20 Filipa Ramos

Thank you for the very beautiful answer. I'm going to go through some of the questions that we have. One from Olga Koroleva, she says, I love your mention to the different weather conditions under and over the water. And I'm curious about how the Creatures of the Lines or how you Sonia, as a filmmaker, have experienced those creatures on the line. And she continues and she says, I think of what creatures weathering the storm in open waters or oceans, for example, and the kind of multiplicity of your experience while filming. So I guess it's a question about encounter and an encounter with the elements and with life.

## 1:22:07 Sonia Levy

Thank you for that guestion Olga, I remember something I would call a beautiful moment of the rain starting to fall. And I didn't notice it at first, but I could see all the fishes starting to, so the water is starting to be much more turbid and and the fishes all starting to shelter under boats. So I think a lot of the creatures of the line are used to the different perturbation that either weather or passing boats or things thrown in the water are put there. And I think yeah, sometimes they even, I'm thinking about yeah, the plastic as well, and the snail, but weathering the storm. I don't think there is such dramatic condition in canals, it would be mainly like, yeah, the sediment being churned. And I know there is no, not so much study being done on that. But I've heard a lot of rumours about the fact that there is still a lot of heavy metals in the sediments. So that's also another question to ask, thinking about how the constant churning also has an impact on the different

#### creatures.

### 1:23:57 Filipa Ramos

Thank you, and continuing on creatures a very, I think, quick and direct question. Mary Hayes asks, what is the creature in the image behind us? Is it microscopic?

### 1:24:10 Sonia Levy

Yes, it's a flat form, its a type of flatform. And yes, it's an image taking in a microscope.

### 1:24:18 Filipa Ramos

Thank you. And Heather, a question for you by Rose Torti. Is there a pressure as an anthropologist to put people at the centre of your work? Can your subjects be non human and that research still be considered anthropological?

#### 1:24:43 Heather Swanson

I think they're, it's a great question. And there are a couple of different ways to answer it. You know, I think for me, the question has never been about whether or not my work is properly anthropological, but about asking the question of how can anthropological tools, how can anthropological tools help me to learn and be curious and to research, the types of worldly dilemmas that are of interest to me? And I think I'm phenomenally grateful to anthropology for everything it teaches me. But the question of whether or not I'm a well disciplined anthropologist is just has never been one of the primary questions for me, I actually became an anthropologist, because I love salmon. So my own biological trajectory is I grew up in a salmon fishing town and was intensely curious about fish and watery worlds from the time I was a child, and I fell in love with salmon and fish first. And then I ended up at uni. And I discovered that anthropology helped me to think about fish. So for me, it's always been that kind of a, an order to the curiosities. That said, another answer is that multispecies anthropology and more than human anthropology are also increasingly growing, and are

increased. It's part of an increasingly growing sort of sub discipline, and a part of the fields. And the space between the broader environmental humanities and its dialogues with anthropology are growing every day. So I do think it's becoming a more and more accepted approach within the fields. In many ways, moving out from the work of Donna Haraway and Anna Tsing, and Anna Tsing is an anthropologist who a number of years ago, wrote a lot wrote a line that was, you know, being human is a multi species relation. And that's always stuck with me as well.

### 1:27:13 Filipa Ramos

Thank you so much, Heather. I think we're all very much looking forward to your salmon book that is due to come up this summer. And in talking about futures, maybe I will just wrap up and conclude with a question to you, Sonia. which concerns the present future of this project - Is it, do you see it as concluded? Do you see it evolving? Or do you see it evolving into something else? Or is this something that you're continuing to work with?

## 1:27:53 Sonia Levy

Thank you. We've been talking for a long time about developing the film also as a multichannel work. I think that was always the goal, because it's such a, it would fit the work to be in a more immersive nonlinear form and to play a bit more with more voices in the archive, bring more material in. But it's also been really useful to have this one channel because it can be shared more widely. So that's one thing we've been discussing with Heather and maybe with with Radar to see if that would be possible to continue some collaboration to develop this as a multi channel. Otherwise, yeah, Heather and I are currently working on a project on the Venetian Lagoon. And this very much we are realising the work of Creatures of the Lines is really helping us to shape some of our methods or way of thinking towards this place, even though it's completely different, of course, a very different types of body of water, but lines already somehow

present. Yeah.

### 1:29:29 Filipa Ramos

Thank you. Yes, I think unless there are other questions. I think it's been beautiful and just an extraordinary, just extraordinary proof of how an artwork is a way of discovering and knowing the world and a complimentary sister let's say epistemology to that of scientific knowledge and to the humanity. And I believe the film will remain available for some days, but maybe Canan you can let us know a little bit.

#### 1:30:29 Canan Batur

Yeah, thank you so much for such a brilliant and generous conversation. Just to reiterate, the film will be available for another five days up until the end of this week, I can see some comments showing appreciation in the chats. A big thank you for sharing and creating such a generous space of contemplation. So thank you so much, Sonia, Heather, Filipa, and to everyone who contributed to the conversation with your questions and comments. The recording of this conversation will be available if you want to trace back some of the gems that has been shared in today's conversation. Thank you again for tuning in. And thank you to our speakers again, Sonia, Heather, Filipa, and Laura and all the team who supported today's event. Jim, Helen, Shannon, thank you. So kind of a virtual applause to everyone. And hopefully see you again soon. Thank you.

## Colophon

**Curator: Canan Batur** 

Assisted by: Helen Hamilton and Shannon Charlesworth

**Technician: Jim Brouwer** 

Commissioned by: Radar, Loughborough